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Public Service Commission of Wisconsin
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April 27, 2015

Via Electronic Filing

Ms. Sandra Paske
Public Service Commission of Wisconsin
P.O. Box 7854
610 N. Whitney Way
Madison, WI 53707-7854

**RE: Application of Northern States Power Company, a Wisconsin corporation, for
Approval to Implement a Community Solar Garden Pilot Program
(Docket No. 4220-TE-101)**

Dear Ms. Paske:

Northern States Power Company, a Wisconsin corporation (NSPW or the Company), submits to the Public Service Commission of Wisconsin (Commission) this application for approval to implement a community solar garden pilot program. Specifically, the Company requests that the Commission:

- approve the proposal for establishing a community solar garden pilot program and offering customers subscriptions, and
- approve the structure of the proposed tariff as presented, with a compliance filing to follow as described herein.

Under the proposed community solar garden pilot program, to be called “Solar*Connect CommunitySM,” the Company will contract with the solar industry for the development of regional solar installations (“community solar gardens” or “solar gardens”) and offer NSPW customers the opportunity to purchase subscriptions to the solar gardens in exchange for a monthly bill credit proportional to the subscription size. A subscriber would receive bill credits for each kilowatt-hour of solar generation associated with their subscription. The amount of money in bill credits a subscriber would receive in a month will vary based on the monthly generation output of the solar array.

More and more NSPW customers are asking for utility-backed solar options, and the Company is interested in exploring new ways to meet that need for those customers who want to, and are able to, make this choice. NSPW is pleased to propose a pilot customer offering that offers value to participants, provides an opportunity for the Company to be more engaged with its customers, and does not rely on rate subsidies from non-participating customers.

The attached application describes the key features of the Company's proposed solar garden pilot offering, including the anticipated overall capacity, pricing, marketing, administration, and subscription terms.

Attached to the application is a proposed tariff for a Voluntary Solar Energy Rider Pilot, Schedule VSE-1, as well as information detailing the derivation of the solar production bill credit rate.

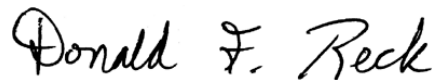
Because customer participation in the proposed program is voluntary, and this application does not request an increase in rates or a reduction in service for non-participating customers, NSPW does not believe a contested case proceeding or hearing is required. NSPW respectfully requests that the Commission issue an Order approving the pilot community solar garden program by June 1, 2015.

Please call Deborah Erwin at (608) 280-7311 if you have any questions regarding this filing. All correspondence concerning this filing should be sent to each of the following:

Deborah Erwin
Xcel Energy
10 East Doty St., Suite 511
Madison, WI 53707

Mara K. Ascheman
Xcel Energy
414 Nicollet Mall 5th Floor
Minneapolis, MN, 55401

Sincerely,



Donald F. Reck
Regional Vice President, Rates and Regulatory Affairs

Encl.

CC: J Ripp, PSCW
D. Erwin
K. Hoesly
M. Ascheman

**BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN**

Application of Northern States Power Company,	}	
a Wisconsin Corporation, for Approval to	}	4220-TE-101
Implement a Community Solar Garden Pilot Program	}	

Pursuant to Wis. Stat. §§ 196.19, 196.20 and 196.378, Northern States Power Company, a Wisconsin corporation, and wholly owned subsidiary of Xcel Energy Inc. (NSPW or Company) submits this request for approval to implement a community solar garden pilot program. In support of the Application, NSPW respectfully states the following:

A. Background

NSPW is a public utility as defined in Wis. Stat. § 196.01 with corporate headquarters located in Eau Claire, Wisconsin. NSPW is engaged in, among other things, the provision of electric power and distribution of natural gas in the states of Wisconsin and Michigan.

NSPW frequently hears from customers regarding the desire to have more energy choices from their utility. Customers wishing to participate in renewable generation have some choices available to them today. For instance, customers interested in supporting renewable energy development can source a portion, or all, of their energy needs through the Windsource[®] program, Schedule VRE-1. Customers interested in solar generation may also opt to purchase, install, and maintain solar panels on their property under net energy billing service, Schedule Pg-1, or under the Company's parallel generation energy purchase service in Schedules Pg-2A, Pg-2B or Pg-2C.

Community solar gardens, which allow participants to buy into a more centralized solar installation in the broader community, are intended to remove some of the traditional barriers customers face when considering solar options. For example, customers who want to use solar power but do not own their property or whose site lacks optimal sun exposure may be good candidates for community solar garden subscription. When neighbors join neighbors to support a central solar array, they can take advantage of better pricing for installed solar without the responsibilities of owning and maintaining the equipment directly. As a result, more solar is installed on the Company's system, and customers have more choices for participating in renewable energy and distributed generation. Importantly, community solar can be done as a stand-alone program designed to minimize subsidization by non-participating customers.

Similar to NSPW's Windsource[®] program, the Company's community solar garden pilot program, Solar*Connect CommunitySM, will give customers another renewable energy choice available from their utility. Some of NSPW's customers have specifically been asking for a way to support local solar development, and have expressed an interest in a more visible connection to renewable energy than the Company's Windsource[®] program currently provides. NSPW will use this solar garden pilot offering as a learning opportunity, and depending on the outcome, will explore the possibility of adding more solar gardens in the future. The Company plans to use the pilot program to assess customer interest in solar garden subscriptions, customer willingness

to pay, and the ability of traditional utility marketing channels to successfully communicate with customers about the program.

The program description includes the key features of the Company's proposed solar garden pilot offering, including the anticipated overall capacity and acquisition, pricing, marketing, administration, and customer subscription terms. The Company's Voluntary Solar Energy Rider is Exhibit A. Example pricing and payback period information is included in confidential Exhibit B. A detailed derivation of the bill credit is included in Exhibit C. NSPW is currently developing an application form for customers to fill out if they are interested in participating in Solar*Connect CommunitySM and a subscription contract for customer to subscribe to the program.

B. Program Description

1. Capacity, Acquisition, and Timing

The Company proposes initially to contract for the development of up to 3 Megawatts (MW) (DC¹) of community solar gardens. Capacity will be obtained through a Request for Proposal (RFP). Bid pricing will include the costs to develop, operate, and maintain the solar garden. The selected bidder(s) will negotiate 25-year Power Purchase Agreements (PPAs) with the Company. Through the RFP process for this 3 MW of capacity, the Company hopes to enable the creation of several "regional" community solar gardens of approximately 500 kilowatts (kW) to 1 MW each, located throughout its service territory.

Proposals will be evaluated on pricing and overall merits, including special consideration for siting near population centers and bids which will complete construction by the end of 2016. The Company plans to issue its RFP by mid-2015.

2. Subscription Pricing and Payment

NSPW proposes a cost-based method of pricing, whereby the Company would set its subscription price for participants based on the PPA costs for the acquired energy and costs to administer the program, including staff time, marketing and communication, and information technology.

The Company's actual pricing determination will follow the signing of its PPA(s) with one or more third-party developers. The Company plans to offer pricing based on the entire initial "batch" of solar gardens (up to 3 MW), so that if more than one solar garden is built in the initial offering, the subscription price would be the same for all solar gardens. Although the pricing may be determined collectively by combining the costs of multiple community solar gardens in a "batch," customer subscriptions will necessarily be specific to a single solar garden. As the energy production of each solar garden is unique, this will result in small variations in customer benefits between subscribers of different solar gardens. If there is not sufficient customer

¹ DC = direct current. Solar panels are rated in terms of their DC output. The DC output is converted to AC (alternating current) by an inverter before it is fed onto the Company's distribution system.

interest in filling all 3 MW immediately, the Company may seek to subscribe a smaller amount of capacity initially, with a subsequent “batch” of solar gardens to be offered for the remainder of the program capacity at a later date, at possibly a different price. Considering the intended “regional” nature of the pilot program, in taking applications for subscriptions, the Company will give an initial preference for subscriptions to customers located in the same region as a solar garden is located. This may mean that customers in a region without strong levels of initial interest will have to wait longer for the opportunity to participate in the pilot.

Subscriptions will be offered in increments of 200 Watts (DC), and sized up to 100 percent of the average annual usage at the premise of each subscriber, based on the most recent 24 months of available historical consumption data (if available).² The subscriber will pay an enrollment deposit equal to \$200 per kW (DC) of the customer’s subscription to reserve the subscription capacity. The deposit will contribute towards the balance of the customer’s subscription cost when the solar garden is built. In order to maximize the ability of a variety of customers to participate in the program, the Company also intends to restrict participation by a single subscriber in any single solar garden to 40 percent of the solar garden’s capacity, and the maximum subscription size offered is 400 kW (DC). Customers choosing to participate will enter into a Solar Garden Contract with the Company.

Each subscriber will pay in proportion to the size of the subscription through an up-front fee due in full before a subscriber’s contract term begins, which at the earliest would be upon commercial operation of the solar garden.³ A customer will select their subscription size, and once the balance of the up-front fee is paid for the subscription and the solar garden is operational, the customer will begin to receive bill credits available to them. The Company has included confidential preliminary estimates of the total up-front cost and anticipated payback period for subscribers in Confidential Exhibit B. The actual cost will reflect the results of the RFP. The pricing will be designed so that the sum of the subscription charges cover the Company’s PPA costs and the costs to administer the program for the life of the solar garden.⁴ The Company will provide the Public Service Commission (Commission) with an updated tariff that includes the actual subscription costs in a compliance filing after the Company has completed the RFP process.

The Company also considered a pay-as-you-go program similar to Windsource[®], but whereas NSPW’s Windsource[®] portfolio is designed to be flexible to changes in customer demand, the solar garden pilot program is designed to cause new, community-sited solar to be built solely for the subscribers of the program. Therefore, the Company feels a longer-term commitment by subscribers makes more sense than a pay-as-you-go approach. Additionally, the Company is concerned about customer confusion with its existing Windsource[®] program, as well as the

² A subscriber’s Solar Garden Contract will contain the details regarding calculating average annual usage.

³ The Company is exploring ways to allow customers to make installment payments during the relatively short period of time between the time of their initial deposit and the time the full balance is due when the solar garden first goes into service.

⁴ In projecting the anticipated PPA costs for the life of the solar garden, the Company will take into account anticipated production for the solar garden based on the National Renewable Energy Laboratory’s PVWatts[®] Calculator, as well as any production guarantees provided by the solar garden owner/operator.

potential to lose current Windsource® customers to the solar garden program due to a lack of differentiation between the two programs if they are both “pay-as-you-go” options. In light of these concerns, the Company believes an up-front payment structure is most appropriate.

3. *Bill Credit*

The Company proposes a bill credit for solar garden production based on the Company’s embedded electric production costs, as shown below. Providing participants with a bill credit based on embedded cost reflects the general concept that a subscriber is “replacing” a portion of their electric supply from the Company’s overall system resources with this specific resource, the solar garden. By basing the bill credit on embedded cost, the Company intends to establish a simple, transparent and repeatable methodology that can be easily updated over time. Use of this methodology is not intended to establish a “value” of solar energy to the Company.

The total dollar value of the solar bill credit reflected on a customer’s bill will fluctuate monthly as production from the solar garden fluctuates. In sunnier months, the solar garden’s production will be higher, while production will be lower in cloudier months. Because solar production varies month to month, the amount of money in bill credits a subscriber sees on their bill will be greater in some months than in others. The Company has divided customers into two classes for purposes of calculating the solar program bill credit. The bill credit rate applicable to a subscriber will depend on customer class. For purposes of Solar*Connect Community, Class 1 will include “small” customers receiving retail electric service from the Company under Schedules Rg-1, Rg-2, Fg-1, Cg-1, Cg-7, or Cp-3. Class 2 consists of “large” customers receiving service from the Company under Schedules Cg-9 or Cp-1.

**Table 1.
Solar Garden Bill Credit per kWh**

Embedded Cost	Class 1 Bill Credit	Class 2 Bill Credit
Fixed Production Cost	\$0.024	\$0.022
Variable Production Cost	\$0.050	\$0.047
Total	\$0.074	\$0.069

The Company is basing this initial bill credit amount on the Company’s average embedded cost currently reflected in retail rates. The bill credit in Table 1 above reflects the Company’s functionalized revenue requirement from the Class Cost of Service Study prepared for NSPW’s last full rate case (2014) in docket 4220-UR-119, with fuel adjusted for the final authorized amount in that docket, and also adjusted for changes authorized in docket 4220-UR-120 (2015). These costs, by function, were divided by total sales as approved in 4220-UR-119 to arrive at the Company’s average embedded cost rate by function to use as the basis for the solar garden bill credit shown above. A more detailed derivation of the bill credit is included in Exhibit C.

The Company proposes to use this framework for the life of the pilot program, but to update the bill credit as needed based on changes to its embedded cost during future rate cases. However,

to provide more certainty to customers subscribing to the solar garden program, the bill credit for a customer's subscription will not go below the initial bill credit level indicated in this filing.⁵

A customer's subscription (measured in kW) will translate into a portion of the overall solar garden's output each month (measured in kilowatt-hours, or kWh), reflecting how much of the solar garden that customer is subscribed to (for example, 10 percent). For illustration purposes, if a 100 kW solar garden produced 100 kWh in a month, and the customer is subscribed to 10 kW of the solar garden's capacity, the customer would receive a credit based on 10 percent of the 100 kWh produced that month, or 10 kWh. Based on a production estimate for a typical solar array in Eau Claire, Wisconsin, a customer with a 1 kW (DC) subscription could expect to receive bill credits for approximately 1,282 kWh of solar production in a calendar year, which translates into approximately \$95 in bill credits per year at the current bill credit rate for Class 1, and approximately \$88 in bill credits per year for Class 2 subscribers.⁶

The bill credit in Table 1 above will be applied to each kWh associated with the customer's subscription for a given month. Customers will see the bill credits for solar garden production as dollars that offset the subscriber's total bill, not kWh that offset consumption. Customers participating in the solar garden program will continue to be billed for all of their electricity needs from NSPW at the applicable retail rate; however, some of that bill will be offset by bill credits from the customer's solar garden subscription. The bill will indicate the credits associated with solar garden program participation. Due to timing differences between when the solar garden production meter is read and a subscriber's meter read cycle, the monthly solar production period upon which the bill credit is based may not match the customer's billing period. The Company expects that the lag would typically not exceed one billing cycle.

4. Marketing & Solar Garden Administration

Costs associated with marketing and administering the solar gardens will be incorporated into solar garden up-front subscription fees. The Company will market its subscription offer to customers in a manner similar to other Company regulated products such as the Windsource[®] program discussed above.

Like in Windsource[®], the Company may pursue subscribers through a targeted outreach campaign to potential participants. As a part of the campaign, the Company will develop print materials and an informational website to communicate to customers about community solar gardens and available subscription opportunities.

The Company will rely on support from its call center and account managers to communicate with customers about opportunities to participate in the Solar*Connect CommunitySM program. NSPW will also reach out to customers through channels that customers expect to use when

⁵ Because the Company's embedded production costs are only part of the retail rate paid by customers, a customer that has a solar garden subscription for 100 percent of their average annual usage will still pay the equivalent of a portion of their retail rate plus their fixed customer charges throughout the year.

⁶ Solar production estimate calculation performed using the National Renewable Energy Laboratory's PVWatts[®] Calculator on April 24, 2015. Available at <<http://pvwatts.nrel.gov>>.

receiving or seeking information regarding any of the products and services offered by the Company.

5. *Other Terms*

a. Contract Term

The Company proposes to offer subscribers a term that coincides with the remainder of the 25 year life of the solar garden. In this way, customers who subscribe to a solar garden at different times will have different contract terms, though their subscriptions will end on the same date. Customers subscribing to the solar garden after year one will pay a price that declines annually based on the depreciated value of the solar garden over the remainder of its 25 year life as seen in Exhibit A, Table A.

b. Cancellation

If a subscriber moves out of the Company's Wisconsin service territory or for other reasons ceases to be a customer of the Company, the subscription will be cancelled upon notice of the cancellation request to the Company, and the Company will refund a pro-rata portion of the cancelling subscriber's up-front contribution at a percentage of the purchase price. The refund amount declines annually, based on the depreciated value of the solar garden over its 25 year life, as seen in Exhibit A, Table B.⁷

The Company may also cancel subscription contracts if the subscriber has not paid for the costs of its subscription or is in other breach of contract. In these circumstances, the deposit and any other payments made by the subscriber are forfeited. The Company may also seek to cancel the subscription for Force Majeure or for any reason, without subscriber penalty. Under identified circumstances, the Company will refund a pro-rata portion of the cancelling subscriber's up-front contribution at a percentage of the purchase price under the conditions set forth in the tariff. The refund amount declines annually, based on the depreciated value of the solar garden over its 25 year life, as seen in Exhibit A, Table A.

c. Transfer

A customer's subscription to a solar garden is "portable," meaning the customer may "take it with them" when they relocate to a new address within NSPW's service territory in Wisconsin. When the customer supplies his or her new premise number, the premise will be checked for compliance with the rule requiring the subscription to be equal to no more than 100 percent of the customer's average annual usage. If the customer's subscription, once associated with a new premise, is greater than 100 percent of the customer's estimated average annual usage at the new premise, the Company will refund the non-compliant portion of the subscription at a percentage of the refund amount using the schedule in Exhibit A, Table A.

⁷ A refund upon cancellation is not available in all cancellation circumstances. A subscriber is only eligible to receive a refund of any portion of the upfront enrollment fee upon cancellation for reasons described in Exhibit A.

There will be no charge associated with a transfer between subscriber premises in this situation, even where the subscription is downsized. The transfer may also result in allowing a subscriber to purchase an increased subscription size, which the subscriber may authorize, as long as the community solar garden is not fully subscribed, the subscription remains no more than 100 percent of the customer's average annual usage, and the customer is not subscribing to more than 40 percent of a single solar garden.

In the event of a move, a subscriber may also choose to donate their subscription to a not-for-profit organization. There will be no charge associated with such transfers or assignments.

d. Renewable Energy Credits

Customers participating in solar gardens would, with their subscription payment, purchase both the energy and the environmental attributes associated with their portion of the solar garden. The Company plans to track Renewable Energy Credits (RECs) associated with its solar garden program in the Midwest Renewable Energy Tracking System, and to retire those RECs on behalf of program participants. Because the Company will retire these RECs on behalf of subscribers, subscribers will be able to represent that they have offset their energy use with solar energy.

C. Unsubscribed Energy

While subscription pricing will be sufficient to recover all costs for the community solar gardens from subscribers, it is possible that at any point in time a solar garden may not be fully subscribed. Unsubscribed energy is energy produced by the solar garden that is not associated with any customer subscription and therefore not allocated to a subscriber. The Company proposes to minimize the possibility of unsubscribed energy by requiring a solar garden to be largely subscribed before the Company becomes obligated under a PPA. The Company will only go forward with a PPA for one or more solar gardens if it is comfortable that there is minimal risk of a substantial amount of unsubscribed energy over the life of the solar garden. Once a solar garden meets this threshold, the Company will commit to purchase the entire output of the solar garden.

If any portion of the solar garden remains unsubscribed at the time the solar garden is built, or for any energy associated with a cancelled subscription, the Company proposes to treat the output associated with the unsubscribed portion as a system resource for NSPW's Wisconsin customers. The Company would essentially treat unsubscribed energy the same as any other source of purchased power for NSPW, and would allocate costs associated with the unsubscribed energy to all customers. However, the cost will not be allocated at the full price of the PPA. Rather, the cost will be allocated to all customers at the solar garden bill credit rate found in Table 1 above. Any unsubscribed energy would result in a small increase in solar for the Company's base resource mix for Wisconsin.

Given the initial subscription threshold approach to the Company's obligations under a PPA described above, the Company expects that unsubscribed energy allocated to the Company would be minimal. Any portion of a solar garden that is not subscribed at any point in time

would remain eligible to be purchased by customer subscription, and the Company would make efforts to maximize subscriptions throughout the life of the solar garden.

D. Public Interest and Customer Benefits

The Company believes the public interest supports this pilot proposal because it provides an expansion of customer choices, minimizes impacts to non-participants, delivers environmental impact benefits through increasing solar on the system, and provides for consumer protection through regulated business practices.

The Company frequently hears from customers about their desire for more choices from their utility. Nationwide, and here in Wisconsin, NSPW has taken note of the growing desire for the customers' ability to customize their energy mix, as customers seek the same kinds of choices from their energy provider that they are offered in other areas of their lives. NSPW is committed to providing customers with new opportunities to tailor their energy services to their unique preferences. By offering access to community solar on a pilot basis, the Company is expanding its portfolio of renewable energy services, and is expanding customers' ability to choose their energy mix from their utility provider.

The approach laid out in this filing for a community solar garden pilot program is keenly focused on minimizing impacts to non-participating customers and delivering solar in the most cost effective way possible. The Company is proposing a variety of pilot program design elements and safeguards to ensure that the costs associated with this customer choice option are borne by those customers who choose to pursue the option. These include up-front payments sufficient to cover the costs of the program for the life of the program, steps to minimize the possibility of unsubscribed energy, and a bill credit at a rate equal to the embedded cost of the power they are not purchasing from the Company.

As stated earlier, NSPW will use this solar garden pilot offering as a learning opportunity, and will explore the possibility of adding more solar gardens in the future. In that vein, while NSPW anticipates being able to offer this pilot program at a competitive price, if the Company determines that the subscription price is higher than customers would be willing to pay after reviewing the results of the RFP, the Company may delay its initial subscription offering until such time that subscription prices become more economic.

E. Next Steps

The Company looks forward to the Commission's review of its pilot program proposal. Because customer participation in the proposed program is voluntary, and this application does not request an increase in rates or a reduction in service for non-participating customers, NSPW does not believe a contested case proceeding or hearing is required. If the Commission approves the Company's proposal, NSPW will make a compliance filing of its solar garden pilot tariff with subscription pricing offered to customers, after the results of the RFP are known.

CONCLUSION

NSPW is pleased to offer a new choice for customers to participate in the benefits of solar generation. By making community solar available to NSPW customers on a pilot basis, the Company is expanding customer options. The Company believes its pricing model is reasonable as it is cost-based and follows traditional ratemaking principles. NSPW respectfully requests that the Commission:

- approve the Company's proposal for establishing a community solar garden pilot program and offering customers subscriptions, and
- approve the structure of the proposed tariff attached here, with a compliance filing to follow once subscription prices are determined.

Respectfully submitted this 27th day of April, 2015.

NORTHERN STATES POWER COMPANY
a Wisconsin corporation, and wholly owned subsidiary of
Xcel Energy Inc.

By: /s/ Donald F. Reck
Regional Vice President, Rates and Regulatory Affairs

VOLUNTARY SOLAR ENERGY RIDER PILOT (SOLAR*CONNECT COMMUNITYSM)

Effective in: All territory served by the Company

Availability: Available to any retail metered electric customer taking service from the Company under Schedules Rg-1, Rg-2, Fg-1, Cg-1, Cg-2, Cg-7, Cp-3, Cg-9, or Cp-1 that chooses to offset electric charges through a Subscription in a Company Solar Garden per the terms of a Solar Garden Contract with the Company, provided that the following requirements are met:

- a. The Company Solar Garden must not have less than five (5) Subscribers;
- b. No single Subscriber (including its affiliates) may have more than a forty (40) percent interest in a Company Solar Garden.

Subscription Size: A Subscription shall mean a proportionate interest in the beneficial use of the electricity generated by a Company Solar Garden. Subscriptions may be elected in blocks of 200 Watts (DC) and sized up to 100% of the average annual usage at the premise of each Subscriber, as determined by the Company, but the Subscription, when combined with certain other Tariff offerings, may not exceed 100% of the average annual usage as set forth in the Solar Garden Contract, and in no case may a Subscriber subscribe to more than 400 kW (DC) of solar capacity under this Tariff. If available, the Company will use the most recent 24 months of historical electric energy consumption data to determine the Subscriber's average annual usage.

Program Subscription Limit

The Company offers the voluntary solar energy rider to retail metered electric customers, beginning at the effective date of the tariff, until fully subscribed. A fully subscribed tariff offering will be reached when the total amount of Subscriptions is equal to 3 MW (DC). Subscriptions may be offered for one or more Company Solar Gardens, but the total amount of capacity available for subscription shall not exceed 3 MW. Any individual Company Solar Garden shall not exceed 1 MW in size.

In processing applications for Subscriptions for a Company Solar Garden, the Company will give initial preference for Subscriptions to customers located in the same region as a solar garden is located. The Company will determine such regions and the process for implementing the in-region Subscription preference, and shall make information regarding both available to customers on the Company's website. The Company intends to offer Subscriptions through this tariff, and cannot guarantee customers will have the option to Subscribe to a Company Solar Garden located in their region. To the extent a Company Solar Garden is not subscribed by customers within its region, the Company will open Subscriptions to customers in other regions. The Company reserves the right to determine the size, number and locations of Company Solar Gardens in its sole discretion, consistent with the terms of this tariff.

Subscription Period Length

The maximum effective term for the monthly Solar Production Credit is 25 years from the beginning of commercial operation of the applicable solar garden. The actual Contract Term applicable to a Subscription begins as identified in the Subscriber's Solar Garden Contract and ends 25 years after the beginning of commercial operation of the applicable Company Solar Garden.

(continued)

ISSUED:

EFFECTIVE: For service rendered on and after

PSCW AUTHORIZATION:

VOLUNTARY SOLAR ENERGY RIDER PILOT (SOLAR*CONNECT COMMUNITYSM) (continued)

Subscriber Upfront Enrollment Fee: Subscribers will be subject to an Enrollment Fee equal to \$[XXXX] per kW (DC) of the Subscription. This fee is due in two parts:

1. An initial Enrollment Deposit Charge, due at the time of enrollment, equal to \$200.00 per kW (DC) of the Subscription Size; and
2. The Balance of the Enrollment Fee, due prior to the start of the Contract Term, as defined in the Solar Garden Contract, equal to \$[XXXX] per kW (DC) of the Subscription Size minus the Enrollment Deposit Charge already paid (item 1 above).

Upfront Enrollment Fee Price Factor Schedule: The Subscriber Enrollment Fee of \$[XXXX] per kW (DC) is subject to application of a percentage factor in Table A below, based on the number of years the Company Solar Garden has been in production at the time of the payment by the Subscriber for enrollment. For purposes of Table A, Year 1 begins on the date of commercial operation of the Company Solar Garden, and the first day of each subsequent year is the anniversary of the date of commercial operation.

Table A. Schedule for Subscription Enrollment Fee Price Factor
and Other Cancellation by Company

Year	Percent of Purchase Price	Year	Percent of Purchase Price	Year	Percent of Purchase Price
1	100%	10	66%	19	30%
2	98%	11	62%	20	26%
3	94%	12	58%	21	22%
4	90%	13	54%	22	18%
5	86%	14	50%	23	14%
6	82%	15	46%	24	10%
7	78%	16	42%	25	6%
8	74%	17	38%		
9	70%	18	34%		

Monthly Solar Production Credit: Subscribers will receive a credit on their bill for retail electric service. The amount of the bill credit a Subscriber is eligible to receive will depend upon the type of retail metered electric service the Subscriber receives from the Company. For purposes of the Solar Production Credit, Subscribers will be categorized as either Class 1 ("small") or Class 2 ("large") as follows:

- Class 1: Customers receiving service under Schedule Rg-1, Rg-2, Fg-1, Cg-1, Cg-7, or Cp-3;
Class 2: Customers receiving service under Schedule Cg-9 or Cp-1.

The Solar Production Credit for solar energy associated with the Subscription shall be at the Company's average embedded production cost per kWh currently reflected in retail rates for customers in the Subscriber's Class (1 or 2), or at \$0.0740 per kWh for Class 1 and \$0.0690 per kWh for Class 2, whichever is higher. The amount of this credit is subject to change as the average embedded production cost per customer reflected in retail rates changes, but the credit will never be lower than \$0.0740 per kWh for Class 1 Subscribers, and will never be lower than \$0.0690 per kWh for Class 2 Subscribers.

(continued)

ISSUED:

EFFECTIVE: For service rendered on and after

PSCW AUTHORIZATION:

VOLUNTARY SOLAR ENERGY RIDER PILOT (SOLAR*CONNECT COMMUNITYSM) (continued)

Monthly Solar Production Credit (cont'):

The Solar Production Credit Rate currently in effect for Class 1 is **\$0.0740** per kWh of solar energy.
The Solar Production Credit Rate currently in effect for Class 2 is **\$0.0690** per kWh of solar energy.

The Company will provide a Solar Production Credit at the Solar Production Credit Rate on each Subscriber's bill for retail electric service for the applicable Production Month. The Production Month to which the Solar Production Credit is applicable shall not necessarily match the billing period for the retail electric service bill in which the Solar Production Credit is applied.

Cancellation: The Subscriber is not eligible to receive a refund of any portion of the upfront enrollment fee upon cancellation of the Subscription except as described in the paragraph titled Refund Upon Cancellation below.

The Solar Garden Contract with the Subscriber is considered to be cancelled and is not eligible to a refund of the pro rata share of the upfront enrollment fee upon any of the following circumstances:

1. The Subscriber for 90 days or more is no longer the customer of record for the Service Address identified in the Subscriber's Solar Garden Contract, and the Solar Garden Contract was not properly assigned to another eligible Service Address before the end of this 90 day period.
2. In the event that the Subscriber (including its affiliates, partnership it belongs to, and any situation where it and another have a joint or common interest) has more than a 40% interest in the beneficial use of electricity generated by a Company Solar Garden, the level of participation above such a 40% interest shall be canceled and is subject to the cancellation charge for the portion of the Subscription Size above the 40% interest cap. The Company will provide notice to the Subscriber of the effective date and level of the new Subscription Size.
3. If any of the representations of the Subscriber are false or incorrect, such false or incorrect representation shall constitute a material breach of the Solar Garden Contract and the Company may cancel the Solar Garden Contract upon notice to the Subscriber.

Refund Upon Cancellation: In the event the Subscriber provides notice of cancellation due to Force Majeure, or due to the Subscriber moving or relocating outside the Service Territory of the Company, or ceasing to be a customer of the Company for other reasons, the Company will refund a pro rata share of the Subscriber's Enrollment Fee, as set forth in Table B below, except that a Subscription that has been donated under the paragraph titled Subscription Donation below is not eligible for a refund under this paragraph. For purposes of Table B, Year 1 begins on the date of commercial operation of the Company Solar Garden, and the first day of each subsequent year is the anniversary of the date of commercial operation.

(continued)

ISSUED:

EFFECTIVE: For service rendered on and after

PSCW AUTHORIZATION:

VOLUNTARY SOLAR ENERGY RIDER PILOT (SOLAR*CONNECT COMMUNITYSM) (continued)

Refund Upon Cancellation (cont'd):

Table B. Cancellation Due to Moving/Relocation Refund Schedule

Year	Percent of Purchase Price	Year	Percent of Purchase Price	Year	Percent of Purchase Price
1	98%	10	62%	19	26%
2	94%	11	58%	20	22%
3	90%	12	54%	21	18%
4	86%	13	50%	22	14%
5	82%	14	46%	23	10%
6	78%	15	42%	24	6%
7	74%	16	38%	25	2%
8	70%	17	34%		
9	66%	18	30%		

Subscription Transfer: A Subscriber may elect to transfer the Subscription to a new premise of the Subscriber which is in the Service Territory of the Company. Such transfer is not subject to cancellation provided that the Subscriber notifies the Company within 90 days of ceasing to be the customer of record for the premise as described in the Solar Garden Contract. In the event that a Subscription of the same Size at the new premise would exceed 100% of the average annual usage at the new premise, then the Subscription will be reduced without charge to a level which complies with the maximum Subscription Size, described above, for the new premise and other requirements of the Solar Garden Contract. The Company will provide written or email notice as to the effective date of the transfer to the new Service Address and the new Subscription Size, and this information will be deemed to replace the corresponding information on the Solar Garden Contract. In the event of a reduction in Subscription Size due to transfer, the Company will refund the excess portion of the Subscription at a percentage of the refund amount using Table A above.

Subscription Donation: In the event the Subscription is eligible for a Subscription Transfer or a Refund Upon Cancellation as described above, the Subscriber may instead elect to donate the Subscription to a not-for-profit organization that is a retail metered electric customer of the Company. Subscription Donation will only be effective if the recipient satisfies the terms and conditions applicable to the Subscription and the Solar Garden Contract and assumes all responsibilities associated therewith. Once a Subscription has been donated, this paragraph will no longer apply, and the Subscription will no longer be eligible for further donation.

(continued)

ISSUED:

EFFECTIVE: For service rendered on and after

PSCW AUTHORIZATION:

VOLUNTARY SOLAR ENERGY RIDER PILOT (SOLAR*CONNECT COMMUNITYSM) (continued)

Cancellation by Company: The Company shall have the unilateral right to cancel a Subscription at any time if the Company Solar Garden does not achieve commercial operation, experiences a Force Majeure event, or for any other reason. Upon cancellation by the Company for any reason other than violation of any of the rules of this Voluntary Solar Energy Rider, the Company shall refund a pro rata share of the Subscriber's Enrollment Fee using Table A above, except that a Subscription that has been donated under the paragraph titled Subscription Donation above is not eligible for a refund under this paragraph.

Terms and Conditions

1. In addition to the rate above, all rates and condition of delivery of the applicable rate schedule under which the customer is currently served are applicable.
2. All terms and conditions apply as stated in the Solar Garden Contract between the Company and the Subscriber for participation in a Company Solar Garden.
3. All Renewable Energy Credits (RECs) associated with the Subscription shall be assigned to the Company on behalf of the Subscriber, and the Company shall retire any RECs associated with a Subscription that are tracked in the Midwest Renewable Energy Tracking System program or any similar program on behalf of the Subscriber.
4. A customer may only subscribe to both this schedule and the Company's Voluntary Renewable Energy Rider (Windsor[®]) if the total amount of both subscriptions combined does not exceed 100% of the average annual usage at the premise of the Subscriber. If a customer's premise is served by distributed generation resources, the Subscription Size combined with the distributed generation resources may not exceed 100% of the average annual usage at the premise of the Subscriber.
5. Solar gardens shall be interconnected to the Company's distribution system, and there shall be no more than 1 MW of Company Solar Garden capacity interconnected to a single distribution feeder.
6. If the Solar Production Credit exceeds the amount owed in any billing period, the excess portion of the Solar Production Credit in any billing period shall be carried forward and credited against all charges.
7. All rates are subject to periodic re-pricing as approved by the Public Service Commission of Wisconsin.
8. Service under this schedule provides for generation or purchase of solar energy into the Company's system and not for actual delivery to the customer.
9. The Company reserves the right to deny or terminate Subscriptions under this tariff to customers in arrears with the Company.
10. The Company reserves the right to limit Subscriptions due to the availability of solar energy from Company Solar Gardens.
11. The Company reserves the right to terminate this pilot program in its sole discretion upon a requisite filing to the Public Service Commission of Wisconsin.

ISSUED:

EFFECTIVE: For service rendered on and after

PSCW AUTHORIZATION:

**Redacted
Exhibit B
Solar*Connect Community
Estimated Subscriber Enrollment Fee and Payback**

Purchased Power Agreement Price/MWh¹	Subscriber Enrollment Fee/kW²	Payback Period³ Class 1⁴
		17-21 years
		18-23 years
		19-25 years
		20- >25 years
		21- >25 years

¹ PPA prices are hypothetical; actual price will reflect the results of the RFP.

² Subscriber fees shown are preliminary estimates, and are dependent on assumptions such as purchased power agreement escalation, solar panel degradation, tax implications and program administrative costs. The per kW fee is based on direct current (DC) capacity.

³ Payback period means the time it would take a subscriber to receive bill credits in the amount of money equal to what the subscriber paid for the upfront enrollment fee. Payback periods described here are estimates only. Ranges of payback periods shown reflect hypothetical increases of 0-3 percent for embedded production costs in retail rates, which would in turn be reflected as changes to the solar program bill credit.

⁴ Class 1 includes customers receiving retail electric service under Schedules Rg-1, Rg-2, Fg-1, Cg-1, Cg-7, or Cp-3. The payback period for Class 2, which includes customers receiving retail electric service under Schedules Cg-9 or Cp-1, is estimated to be slightly longer due to the slightly lower bill credit.

Exhibit C
Solar*Connect Community
Subscriber Bill Credit Derivation

Table 1 - Re-creation of Marx Exhibit from 4220-UR-119, PSC REF# 185622 Schedule 1 of Page 71 & 72, of 74)

NSPW 2014 Test Year PSCW Docket No. 4220-UR-119			Wisconsin Retail Method	
TITLE	Category	TOTAL WI RETAIL	WI SMALL and MEDIUM	WI LARGE
ANNUAL SALES MWh	Sales	6,309,853	3,240,863	3,068,990
CHECK ON REV REQ AT REQ ROR				
(1) Customer Related	Cust	\$ 46,540,582	\$ 44,002,127	\$ 2,538,455
(2) Production (fixed) Related	Prod	\$ 135,504,358	\$ 73,990,569	\$ 61,513,789
(3) Transmission (fixed) Related	Trans	\$ 77,951,434	\$ 43,569,484	\$ 34,381,950
(4) Distribution Related	Dist	\$ 91,190,699	\$ 75,541,254	\$ 15,649,446
(5) Production (variable) Related	Fuel	\$ 305,459,257	\$ 162,130,866	\$ 143,328,391
(6) Total Revenue Requirement	Total	\$ 656,646,331	\$ 399,234,300	\$ 257,412,031
		\$ -	\$ -	\$ -

Table 2 - Re-creation of Marx Exhibit (Updated for PSCW Staff Revenue Requirement)

NSPW 2014 Test Year PSCW Docket No. 4220-UR-119				
TITLE	Category	TOTAL WI RETAIL	WI SMALL and MEDIUM	WI LARGE
(11) ANNUAL SALES MWh	Sales	6,438,518	3,268,877	3,169,641
CHECK ON REV REQ AT REQ ROR				
(12) Customer Related	Cust	\$ 45,590,059	\$ 43,051,549	\$ 2,538,511
(13) Production (fixed) Related	Prod	\$ 135,792,002	\$ 72,539,374	\$ 63,252,628
(14) Transmission (fixed) Related	Trans	\$ 75,913,690	\$ 41,838,385	\$ 34,075,305
(15) Distribution Related	Dist	\$ 88,345,552	\$ 72,938,238	\$ 15,407,314
(16) Production (variable) Related	Fuel	\$ 306,202,036	\$ 159,880,292	\$ 146,321,744
(17) Total Revenue Requirement	Total	\$ 651,843,339	\$ 390,247,838	\$ 261,595,502

Adjustments (post Table 2)				
TITLE	Category	TOTAL WI RETAIL	WI SMALL and MEDIUM	WI LARGE
(21) <u>4220-UR-119</u> Post hearing Fuel Adjustment 4220-UR-119	Fuel	\$ (4,236,915)	\$ (2,151,109)	\$ (2,085,806)
(22) <u>4220-UR-120</u> Trans Reserve Credit	Trans	\$ (16,239,000)	\$ (8,244,644)	\$ (7,994,356)
(23) Incr Tran Rev Requiremnt	Trans	\$ 8,500,000	\$ 4,315,504	\$ 4,184,496
(24) Monti Deferral	Prod	\$ (5,197,000)	\$ (2,638,550)	\$ (2,558,450)
(25) Incr Prod Rev Requiremnt	Prod	\$ 17,868,000	\$ 9,071,698	\$ 8,796,302
(26) Incr Prod Fuel Rev Requiremnt	Fuel	\$ 9,245,000	\$ 4,693,746	\$ 4,551,254
(27) Total 4220-UR-120	Total	\$ 14,177,000	\$ 7,197,754	\$ 6,979,246

Table 3 - Current 2015 Revenue Requirement (Adjusted for post hearing 4220-UR-119 authorized adjustments)

Adjusted Revenue Requirements				
CHECK ON REV REQ AT REQ ROR	Calculation	TOTAL WI RETAIL	WI SMALL and MEDIUM	WI LARGE
(31) Customer Related	(12)	\$ 45,590,059	\$ 43,051,549	\$ 2,538,511
(32) Production (fixed) Related	(13) + (24) + (25)	\$ 148,463,002	\$ 78,972,522	\$ 69,490,480
(33) Transmission (fixed) Related	(14) + (22) + (23)	\$ 68,174,690	\$ 55,603,829	\$ 30,265,445
(34) Distribution Related	(15)	\$ 88,349,466	\$ 72,938,238	\$ 88,349,466
(35) Production (variable) Related	(16) + (21) + (26)	\$ 311,210,121	\$ 164,574,038	\$ 148,787,193
(36) Total Revenue Requirement	Total	\$ 661,787,339	\$ 415,140,175	\$ 339,431,094
(37) Production Fixed (\$/kWh)	(32) / (11)		\$ 0.024	\$ 0.022
(38) Production Variable (\$/kWh)	(34) / (11)		\$ 0.050	\$ 0.047
(39) Production Total (\$/kWh)	(37) + (38)		\$ 0.0740	\$ 0.0690